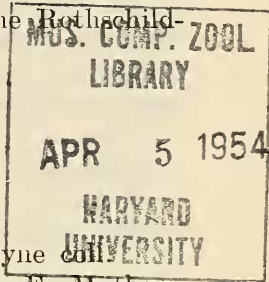


Aberrations of British Macrolepidoptera

By E. A. COCKAYNE, D.M., F.R.C.P.

PLATE II.

The aberrations mentioned in this paper are all in the Rothschild-Cockayne-Kettlewell Collection in the British Museum.



ARCTIIDAE

ARCTIINAE

Arctia villica Linnaeus ab. **spoliata** ab. nov.

Spot 4 is missing on the fore wing; otherwise normal.

Type ♀: Cornwall, 11.vii.1902. (Massey coll.), Cockayne coll.

Paratypes 2 ♀: 1 ♀ Harwich district, 1899, Gervase F. Mathew.

Rothschild coll.: 1 ♀ Totland Bay, I. of Wight, bred vi.1888. Cockayne coll.

Schultz names all specimens with a spot or spots missing on the fore wing ab. *strandii*, but these are different both genetically and in appearance. I restrict *strandii* to the commonest form with a spot missing, which is the cream spot at the discoidal.

NOLINAE

Nola cucullatella Linnaeus ab. **nigrofasciata** ab. nov. (Fig. 6).

The basal and marginal areas of the fore wing are of the same pale brown, but the whole of the median area is black. Thus the area at the base, which is usually black, is pale and the median area, which is usually pale, is black.

Type ♂: Berkhamsted, Herts., 14.vii.1949, taken at light by Peter Bell.

AGROTIDAE

Agrotis ipsilon Hufnagel ab. **nigrostriata** ab. nov. (Fig. 1).

On the fore wing below the reniform and orbicular stigmata there is a small oval mark touching the antemedian line where it crosses the claviform; from the upper side of this a black streak runs obliquely to the postmedian line.

Type ♀: N. Kent, 1.ix.1926, L. W. Newman (Sale Debenham Storr Ltd., 29.i.1953, lot 240 A). Cockayne coll.

This aberration is exactly parallel to *Diarsia festiva* ab. *nigrostriata* Bytinski-Salz described from Shetland. There is a Shetland example and a much more striking English one on a pale ground in the Rothschild-Cockayne-Kettlewell Collection.

Caradrina blanda Schiffermüller ab. **albescens** ab. nov.

The head, thorax, legs, and fore wing are whitish brown; the abdomen is even paler, and the hind wing is almost white. It is an albino.

Type ♂: Ashridge, Herts., 21.vii.1953, taken in m.v. light-trap by A. L. Goodson.

A second specimen was taken shortly afterwards in the same trap, but was imperfectly expanded on the left side and was not kept. Mr. Frank Lees also caught a male at Maidencombe the same year.

Brachionycha sphinx Hufnagel ab. **fusca** ab. nov. (Fig. 4).

The fore wing, thorax, and abdomen are blackish brown; on the fore wing the usual black markings are visible and external to and below the black mark near the anal angle lies the normal white mark and other whitish marks lie between the black ones and the termen; the fringe is brown. The hind wing is dark brown, a little paler than the fore wing; the discoidal mark is faint; the fringe is brown. The paratype has some light hairs mixed with the dark ones on the thorax, and the abdomen and hind wing are not so dark.

Type ♂ : Tring, Herts., 17.x.1953. A. L. Goodson.

Paratype ♂ : Tring, 1.xi.1953. A. L. Goodson. Both at m.v. light.

A figure of a normal specimen from the same place is given for comparison (Fig. 2).

Plusia gamma Linnaeus ab. *gartneri* Skala, *Ent. Z.*, 1929, **42**: 317 (Fig. 3).

I think the specimen figured is *gartneri* Skala, but I shall be glad if my Continental readers will correct me if I am wrong. This, the only

EXPLANATION OF PLATE II

- Fig. 1. *Agrotis ipsilon* ab. *nigrostriata*. ♀ Type.
 Fig. 2. *Brachionycha sphinx*. ♂ nominotypical.
 Fig. 3. *Plusia gamma* ab. *gartneri* Skala.
 Fig. 4. *Brachionycha sphinx* ab. *fusca*. ♂ Type.
 Fig. 5. *Eupithecia venosata* ab. *basinigrata*. ♂ Type.
 Fig. 6. *Nola cucullatella* ab. *nigrofasciata*. ♂ Type.
 Fig. 7. *Zygaena trifolii* ab. *pygmaea*. ♂ Type.
 Fig. 8. *Euphyia luctuata* ab.
 Fig. 9. *Zygaena filipendulae* ab. *nigrolimbata*. ♀ Allotype.
 Fig. 10. *Colotois pennaria* ab. *cuneata* Rudolph.
 Fig. 11. *Selidosema brunnearia* ssp. *scandinaviaria* ab. *bellaria*.
 ♂ Type.

British example of which I have any knowledge, was taken at Mortehoe, N. Devon, viii.1928, by J. H. Bell. A parallel aberration is *Plusia pulchrina* ab. *gloriosa* Cockayne (*Ent. Record*, 1951, **63**: 163). An account of its capture in Gloucestershire with a figure is given by G. Clutterbuck (*Entomologist*, 1920, **53**: 1).

GEOMETRIDAE

Euphyia luctuata Schiffermüller, aberration (Fig. 8).

This was bred viii.1953 by Mr. H. S. Robinson from an egg laid by a female taken at Ham Street, Kent. I have not seen another like it.

Eupithecia venosata Fabricius ab. **basinigrata** ab. nov. (Fig. 5).

On the fore wing the basal area is of the normal pale colour, but the area between the black basal line and the antemedian is smoky giving it the appearance of having a blackish base; the rest of the wing is normal. Hind wing normal.

Type ♂ : Tring, Herts., 29.v.1953, A. L. Goodson.

Colotois pennaria Linnaeus ab. *cuneata* Rudolph. *Notul. ent. Helsingf.*, 1925, **15**: 47, Pl. 1, fig. 11 (Fig. 10).

Taken near Aldbury, Herts., 22.x.1953, by A. L. Goodson.

Selidosema brunnearia de Villers ssp. *scandinaviaria* Staudinger ab. **bellaria** ab. nov. (Fig. 11).

The ground colour is normal. On the fore wing the dark basal line is thick and the costa is dark from the extreme base to the basal line; the median shade is absent, but the discoidal spot is distinct; a short distance external to the discoidal spot there is a broad blackish brown band running right across the wing from the costa to the inner margin; the outer aspect of the band is slightly dentate owing to a projection at each nervure; the nervures themselves are darkened; the border instead of being dark is of the normal ground colour. On the hind wing the broad blackish brown band is continued, but is broader and touches the enlarged discoidal spot; as on the fore wing the outer aspect is slightly dentate and the nervures are darkened. At first sight the band appears to have no relation to any normal markings, but on closer examination it is seen that it is limited by transverse lines faintly visible in the normal moth.

Type ♂: New Forest, viii.1936, taken by J. H. Bell, after whom I have named it.

This aberration and the *Plusia gamma* ab. *gartneri* were generously presented by his son Mr. Peter Bell, who also gave the remarkable aberration of *Nola cucullatella*.

ZYGAEENIDAE

Zygaena trifolii Esper ab. **pygmaea** ab. nov. (Fig. 7).

Both fore and hind wings are about half the normal length and width, but the markings are normal.

Type ♂: Watergate, Emsworth, Hants., 9.vi.1895, W. M. Christy.

Allotype ♀: Same data.

Paratypes 2 ♂♂: Same data.

This aberration was bred from the colony at Emsworth, and is almost certainly genetic.

Zygaena lonicerae Scheven ab. **grisescens** ab. nov.

All the parts which are normally glossy dark green or black are silvery grey, including the margin of the hind wing and the abdomen. The thorax and abdomen are slightly darker grey. The red parts of the wings are normal. This albino is even paler than *Z. filipendulae* L. ab. *grisescens* Oberthür.

Type ♂: Loc. incog. (S. Webb coll., Gregson coll.) R. Adkin coll.

Allotype ♀: Loc. incog. (Harper coll., 1884) R. Adkin coll.

Paratypes 5 ♂♂: 1 ♂ Loc. incog. (Mason coll.) Bankes coll.; 1 ♂ Loc. incog. Rothschild coll.; 1 ♂ Loc. incog. (Hodgkinson coll., Vipan coll.) Cockayne coll.; 1 ♂ Loc. incog. (Harper coll., 1885) R. Adkin coll.; 1 ♂ Sandburn, Yorks., bred 15.vii.1901 by S. Walker. Cockayne coll. The type is figured by Barrett, Pl. 59, fig. 3 c.

The aberration differs from ab. *eboracae* Prest. I have compared it with specimens of ab. *eboracae* sent by Prest to Tutt, and these have the green and black parts a darker grey than *grisescens* and the red parts are paler red.

Zygaena filipendulae Linnaeus ab. **spoliata** ab. nov.

On the fore wing spot 4, the spot of the middle row nearer to the inner margin, is absent.

Type ♂ : near Tring, Herts., 7.viii.1941, A. L. Goodson. Cockayne coll.

Allotype ♀ : Loc. incog. (F. Bond coll.) R. Adkin coll.

The allotype is figured by Barrett, Pl. 60, fig. 1 h.

Zygaena filipendulae Linnaeus ab. **griseorosea** ab. nov.

The parts which are red normally are dull pink and slightly smoky in appearance.

Type ♂ : Pont-liau-fraith, 7.vii.1906, W. Rait-Smith. Cockayne coll.

Allotype ♀ : Bristol, 4.vi.1908. Rothschild coll.

Zygaena filipendulae Linnaeus ab. **nigrolimbata** ab. nov. (Fig. 9).

There is a broad black band along the margin of the hind wing which widens to cover the whole apical region and extends along the inner margin, where the black margin is very wide.

Type ♂ : Loc. incog. (Harper coll., sold Stevens 1884). Oberthür coll.

Allotype ♀ : Same data.

A Note on the Larva of *Coleophora vitisella* Gregson

By H. N. MICHAELIS.

Meyrick in *A Revised Handbook of British Lepidoptera* and L. T. Ford in *A Guide to the Smaller British Lepidoptera* give the occurrence of the larva as " 9-4 " (Sept.-Apl.), indicating that the larva completes its growth in one span of seven months. Examination of the specimens and larval cases in the Sidebotham Collection at the Manchester Museum showed a small larval case marked " first year " and a larger marked " second year."

I then decided to trace accounts of the life history in works published earlier than those mentioned above. The first reference was found in the *Entomologists Annual*, 1857, which showed that C. S. Gregson found the larva on *Vaccinium vitis-idaea* at Staley Brushes near Stalybridge, Cheshire, on 16th April 1856, and described the species in the *Zoologist*, 1856, p. 5167. The note in the *Entomologists Annual* led to a perusal of Stainton's *Natural History of the Tineina*, vol. V, 1860. On pages 101/102 is a clear account of the life history showing the larva needs a little less than two years to reach the pupa stage. The second year case and larva are figured on Plate XII.

A visit to Staley Brushes in mid-April 1953 produced a number of large and small cases from the underside of the leaves of *Vaccinium vitis-idaea* which were placed on a growing plant kept outside. A brownish blotch seen on the upperside of a leaf betrays the proximity of a larva. By May 7th the larvae in the larger cases had all settled on the upperside of the leaves where they normally pupate. These were removed indoors and the imagines emerged from 25th May to 5th June. At the beginning of May the larvae in the smaller cases